COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

STATEMENT OF LEGAL AND FACTUAL BASIS

International Paper - Franklin Mill
Franklin, Virginia
Permit No.: TRO - 60214

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, International Paper - Franklin Mill has applied for a Title V Operating Permit for its Franklin facility. The Department has reviewed the application and has prepared a Title V Operating Permit.

Permit Writer/Contact: _____ Date: _____
Laura D. Corl
(757) 518-2178

Regional Air Permits Manager: _____ Date: _____
Troy D. Breathwaite

I. FACILITY INFORMATION

Permittee and Facility
International Paper Franklin Mill
34040 Union Camp Drive
Franklin, VA 23851

Responsible Official
Allison Magness
Mill Manager

NO_x Budget Trading Authorized Account Representative
Sheryl Raulston
EHS Manager

Facility Contact Person
Sheryl Raulston
EHS Manager
(757) 569-4558

AFS Identification Number: 51-093-00006
ORIS Code and/or EIA Facility ID: 52152

Facility Description:

NAICS 322121 - Pulp Mill (SIC 2611),

International Paper Franklin Mill was shut down in April 2010 for making paper. The mill has been idle since that time and now the mill is being repurposed to manufacture fluff pulp. Other equipment at the mill has been sold (or are being sold) to other companies to utilize the equipment in other manufacturing processes.

International Paper, itself, will produce fluff pulp and turpentine from logs and wood chips using the Kraft process. The mill has the capability of generating most of the power used at this mill.

There are 9 major parts of this fluff pulp operation: 1) the Wood Yard process area; 2) the Unbleached Pulp Mill process area; 3) the Caustic Recovery process area; 4) the Chemical Recovery process area; 5) the Bleach Plant process area; 6) the Pulp Machine process area; 7) the Power House process area; 8) the Wastewater Treatment System process area; and 9) Miscellaneous processes.

This plant is operating under a Federally Enforceable State Operating Permit (FESOP) dated March 31, 2006, amended on April 3, 2012, which includes the site-wide emissions cap conditions. The site-wide emission cap includes emissions from other companies operating equipment at the site. This permit is only for the International Paper operations.

In repurposing the mill, the facility will now be complying with 40 CFR Part 63, Subpart S as written. From 2006 through 2010 the facility operated using an Equivalency Permit which was granted to the Department of Environmental Quality by EPA. On April 15, 2004, EPA published in the Federal Register an approval of an EBP (Equivalency by Permit) for the Virginia DEQ. This approval allowed the Virginia DEQ to establish and enforce alternative state requirements for International Paper - Franklin Mill in lieu of those in the Pulp and Paper MACT (40 CFR Part 63, Subpart S). The facility no longer wishes to operate in this manner and has requested to have their permit changed to reflect that they will now comply with the MACT as written.

This facility was granted a regulatory variance allowing DEQ to cap the emissions of 10 pollutants. The variance also waives the requirement for minor or major source permitting prior to construction projects at the facility. The site-specific regulation is codified at 9 VAC 5 Chapter 230. The facility and other companies operating onsite will continue to operate under the site-wide emission cap. International Paper is the facility that manages the emission cap, but this permit will only include the equipment and emission sources that are directly operated by International Paper.

II. COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, was conducted on August 30, 2011, even though they were not operating at the time. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, were evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

III. EMISSIONS INVENTORY

2009 Emissions are summarized in the following tables:

2009 Actual Emissions

	2009 Criteria Pollutant Emission in Tons/Year				
Pollutant	VOC	CO	SO_2	PM_{10}	NO_x
Total	469.6	1261.9	5000.5	574.9	1692.5

	2009 Hazardous Air Pollutant Emission in Tons/Yr				
Pollutant	Acetaldehyde	Acrolein	Chlorine	Formaldehyde	Sulfuric Acid Mist
Total	8.6	0.6	6.2	13.5	38.6

	Hydrogen Chloride	Hydrogen Fluoride	Lead	TRS
Total	133.5	11.1	.072	163.1

We are listing the emissions from the last full year that the facility operated as a paper mill. The plant has been idle since the middle of 2010 and is going to begin startup of the new operation in April 2012.

IV. EMISSION UNIT APPLICABLE REQUIREMENTS

A. Section III - Definitions
Section III of the permit defines the various terms and acronyms used throughout the permit.

B. Section IV - Site-Wide Requirements
Section IV of the permit is pulled directly from the Site Wide Emission Cap (SWEC) Federally Enforceable State Operating Permit (FESOP) dated March 31, 2006, and amended on April 3, 2012, which was derived from the State Variance (9 VAC 5-230).
The following Virginia Administrative Codes are the applicable requirements that apply to the entire facility:

9 VAC 5 Chapter 80	Article 1: Federal Operating Permits for Stationary Sources
9 VAC 5 Chapter 80	Article 2: Permit Program Fees for Stationary Sources
9 VAC 5 Chapter 80	Article 4: Insignificant Activities
9 VAC 5 Chapter 80	Article 5: State Operating Permits
9 VAC 5 Chapter 140	Emissions Trading
9 VAC 5 Chapter 230	Variance for International Paper Franklin Paper Mill

C. Section V - Unbleached Pulp Mill Process Area
There is a federal regulation applicable to this section of the plant:

40 CFR Part 63 Subpart S - National Emission Standards for Hazardous Air Pollutants for Source Category: Pulp and Paper Production (known as MACT I and MACT III)

The following Virginia Administrative Codes are other applicable requirements that apply to the source:

9 VAC 5 Chapter 40	Part I: Special Provisions
9 VAC 5 Chapter 40	Article 13: Emission Standards for Pulp and Paper Mills

Digesters
The digester is applicable to Chapter 40 Article 13 for TRS emissions and to 40 CFR 63 Subpart S so the applicable TRS emission limits have been placed in the permit. The emissions from the digester go to the LVHC (Low Volume High Concentration) Collection System (See Appendix B). In previous permits this collection system was referred to as the Non-Condensable Gas Collection (NCG) System. As a result of Subpart S this collection system became the LVHC collection system. The gases are collected and routed to either No. 6 Recovery Furnace or the No. 4 Lime Kiln. The LVHC system is a closed vent system. This system has emergency vents which are monitored by a computer system. The computer system is set up to sound an alarm when one of the vents releases to the atmosphere. The turpentine system and the chip bin emissions are also collected by the LVHC. Because all the emissions from the digester go into the LVHC, and are then incinerated in either No. 6 Recovery Furnace or the No. 4 Lime Kiln, it is highly unlikely that the 5 ppm limit for TRS will be exceeded. Therefore, no monitoring of this emission limit is required in the permit.

The collection of the condensates and the gases to comply with the Pulp and Paper MACT will be demonstrated in accordance with the monitoring requirements in the MACT (See Appendix B). Some of these requirements are listed in the permit. The MACT has two parts with different requirements for each part: MACT I or Phase 1 of the MACT required the collection of LVHC gases and condensates; MACT III or Phase 2 of the MACT required collection of the HVLC (High Volume Low Concentration) gases and condensates.

With this permit the facility has asked to have two different options available to meet the condensate collection requirements of the MACT. Originally they were using the 65% collection efficiency option [40 CFR 63.446(c)(2)]. With the issuance of the last permit, we have added the collection option to obtain at least 11.1 lbs/ton HAP [40 CFR 63.446(c)(3)]. Both/either option(s) will be demonstrated on a daily basis through flows,

mass balances and annual methanol testing. The closed collection system and the closed vent system will be monitored for leaks on a monthly basis as well as having annual testing for leaks. The collected condensates will be routed to a stripper which will remove at least 92% of the HAPs (or reduce concentrations to 10.2 pounds per oven dried tons of pulp). The facility will have to prove this 92% collection efficiency by monitoring the wastewater feed rate, the steam feed rate and the process wastewater column feed temperature (See the Chemical Recovery Section).

Semi-annual reports are required for excess emissions from the TRS collection system, the LVHC collection system and the HVLC collection system.

We have required 'once per permit term' testing for methanol from the condensate streams listed in Condition V.D.1 to be sure that the 65% collection efficiency required by the MACT is being met.

Opacity - The original Title V permit had a generic opacity limit (based on 9 VAC 5-40-80) for the various existing units in this part of the plant. Because most of the units/processes in this part of the plant are wet processes, performing a Method 9 is impractical, so there are no visible emission limited listed. One process that might have opacity is the chip conveyor which is an insignificant unit. One other unit is the K2 chip bin which is exhausted into the LVHC system to be incinerated, and therefore, there should not be any opacity to be observed.

The HVLC gases from the washers and deckers will be routed to the No. 6 Recovery Furnace for destruction and will be monitored in accordance with the Condition V.B.6-8.

D. Section VI - Caustic Recovery Process Area

There are two federal regulations that apply to this section of the plant:

40 CFR Part 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels
40 CFR Part 63, Subpart MM	National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semi chemical Pulp Mills

The following Virginia Administrative Codes are other applicable requirements that apply to the source:

9 VAC 5 Chapter 40	Part I: Special Provisions
9 VAC 5 Chapter 40	Article 13: Emission Standards for Pulp and Paper Mills

Lime Kilns
The lime kiln is subject to emission standards from 9 VAC 5-40-1690 and 40 CFR 63 Subpart MM. The particulate standard of 9 VAC 5-40-1690 for the lime kiln is Condition VI.A.1. From Subpart MM, the facility is using 40 CFR 63.862(a)(1)(ii) for a combined emission standard from multiple units. The TRS emission standard of 9 VAC 5-40-1690 is in Condition VI.A.7.

Continuous monitoring will be achieved by using the CEMS which records the TRS emissions from the kilns. Any exceedances must be reported quarterly because the CEMS is a direct compliance monitor. Compliance Assurance Monitoring (CAM) conditions for the Lime Kiln has been incorporated into this permit for compliance with 40 CFR Part 64. Parametric monitoring of the lime kiln scrubber should be sufficient to ensure the proper operation of the scrubber. There is no visible emission limit listed for the scrubber due to large amounts of steam being emitted thus making a Method 9 impractical. Parametric monitoring of the scrubber should be sufficient.

Slakers
The slaker tank units (CAU-04, CAU-05) are subject to emission standards from 9 VAC 5-40-1690. The particulate emission standard is for all the slaker tank units, combined.

The slakers are subject to CAM and will have parametric monitoring to prove compliance with the emission standards. The CAM plan is part of the monitoring section, however, at the time of issuance the testing to determine parameter ranges has not been performed. By 40 CFR 64.4(e) the parametric testing must be performed within 180 days of startup of each slaker unit.

The opacity condition in the original permit has been removed because this is a wet process and there will be no visible emissions from these tanks.

Recordkeeping and reporting requirements for this section of the mill include excess emission reports for the CEMS on the kiln and the parametric monitoring of the scrubber. Specific requirements from Article 13, the FESOP and Subpart MM are included.

E. Section VII - Chemical Recovery Process Area

There are four federal regulations applicable to this section of the plant:

40 CFR Part 63 Subpart S	National Emission Standards for Hazardous Air Pollutants for Source Category: Pulp and Paper Production
40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills
40 CFR Part 60, Subpart Kb	Standards for Storage Vessels for Petroleum Liquids
40 CFR Part 63, Subpart MM	National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semi chemical Pulp Mills

The following Virginia Administrative Codes are other applicable requirements that apply to the source:

9 VAC 5 Chapter 40	Part I: Special Provisions
9 VAC 5 Chapter 40	Article 13: Emission Standards for Pulp and Paper Mills

Recovery Furnace Units
The facility will prove compliance with the particulate emission standard for the No. 6 recovery furnace by performing a stack test once per permit term. This unit is CAM applicable; the CAM plan is in the permit.

TRS emissions will be monitored by the CEMS, which are already in place on the No. 6 recovery boiler.

Visible emissions from the recovery boiler will be monitored by the COMS which are already on the recovery boiler.

Smelt Dissolving Tanks
The facility will prove compliance with the particulate emission standard and the TRS emission standard for the smelt dissolving tanks by performing a stack test once per permit term to demonstrate compliance. These units are CAM applicable and a CAM plan is in the permit.

Visible emission evaluations are not necessary because this is wet scrubber process, making a Method 9 impractical.

Multiple-Effect Evaporators
The G-set of multiple effects evaporator and condensate stripper are the only units in this process area that are applicable to 40 CFR Part 60, Subpart BB. 40 CFR 63 Subpart S requires collection and incineration of these emissions.

The emissions from the evaporators go to the LVHC collection system. The gases are collected and routed to either No. 6 Recovery Furnace or the No. 4 Lime Kiln where they are incinerated. The LVHC collection is a closed system. This system has emergency vents, which are monitored by a computer system. The computer system is set up to sound an alarm when one of the vents releases to the atmosphere. Because all the emissions from the evaporators go into the LVHC, and are then incinerated in either No. 6 Recovery Furnace or the No. 4 Lime Kiln, it is highly unlikely that the TRS emission limit will be exceeded. Monitoring of the LVHC collection system is also part of the Pulp and Paper MACT which requires monthly visible inspections and annual testing of the closed vent systems.

Condensate Stripper System
The emissions from the condensate stripper go to the LVHC collection system. This system is part of 40 CFR 63 Subpart S requirements and has associated monitoring and reporting as part of the MACT. Because all the emissions from the stripper go into the LVHC collection system and are then incinerated in either No. 6 Recovery Furnace or the No. 4 Lime Kiln, it is highly unlikely that the TRS emission limit will be exceeded.

Tanks
There is one tank that by size might be 40 CFR Part 60, Subpart Kb applicable, but it is a process tank and therefore not applicable (see definition of storage vessel in Subpart Kb).

Recordkeeping and reporting requirements for this section of the mill include MACT Subpart S requirements, MACT Subpart MM requirements, Subpart BB requirements, 9 VAC 5 Chapter 40, Article 13 requirements and those pulled from the FESOP. Excess emission reports and quarterly TRS reports are included.

F. Section VIII - Bleach Plant Process Area
There are some federal regulations applicable to this section of the plant:

40 CFR Part 63 Subpart S - National Emission Standards for Hazardous Air Pollutants for Source Category: Pulp and Paper Production

The following Virginia Administrative Codes are other applicable requirements that apply to the source:

9 VAC 5 Chapter 40 Part I: Special Provisions

Bleach Lines
Parts of the bleach plant are subject to 40 CFR 63 Subpart S. The bleach plant scrubber system is restricted to 10 ppm of total chlorinated HAP by the Pulp and Paper MACT (Subpart S). The MACT also requires a continuous parametric monitoring system for the scrubber to prove compliance with the limit. The parameters being monitored are: the pH of the gas scrubber effluent; the gas scrubber liquid influent flow rate; and the operation of the fan motor for the vent gas flow (low speed alarm).

The HVLC gases are collected from the units specified in Appendix A of the permit and incinerated in the No. 6 Recovery Furnace. The sources of these gases have changed from the last permit and are reflected in the updated Appendix A. Monitoring of the collection system is required by MACT Subpart S.

Recordkeeping and reporting to meet MACT Subpart S requirements have been included.

G. Section IX - Pulp Machine Process Area

There is no federal regulation applicable to this section of the plant.

The following Virginia Administrative Codes are other applicable requirements that apply to the source:

9 VAC 5 Chapter 40	Part I: Special Provisions

Pulp Machines

There are no specific limitations associated with this process area. There are no visible emission requirements associated with the pulp machine because this is wet process, and there will be no visible emissions from this process.

H. Section X - Power House Process Area

There are three federal regulations applicable to this section of the plant:

40 CFR Part 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
40 CFR Part 60, Subpart GG	Standards of Performance for Stationary Gas Turbines

The following Virginia Administrative Codes are other applicable requirements that apply to the source:
Applicable Requirements:

9 VAC 5 Chapter 50	New and Modified Stationary Sources Part I: Special Provisions and Part II: Emissions Standards - Articles 1, 2, 4 & 5
9 VAC 5 Chapter 60	Hazardous Air Pollutant Sources Part I: Special Provisions and Part II: Emissions Standards - Articles 2, 4 & 5

#9 Power Boiler

This unit is subject to 9 VAC 5 Chapter 50 and 60 as well as to 40 CFR Part 60, Subpart GG. The duct burner is subject to 40 CFR Part 60, Subpart Db. This unit has a CEMS to monitor the emissions of NO_x and CO. No visible emission monitoring was put in the permit, because the unit only fires natural gas and there should be no visible emissions when firing natural gas. Excess emissions reports have to be submitted quarterly because the CEMS are used for direct compliance.

Tanks

PWR-10: Old No. 910 Fuel Oil Storage Tank is Kb sized, but currently not applicable because it is used for storing process liquids that do not meet the applicability of 40 CFR Part 60, Subpart Kb. This unit is on the insignificant emissions unit list and no monitoring is associated with this tank. We have left a condition in the permit in the event the tank stores a Kb applicable liquid at some future time.

Recordkeeping and reporting requirements include requirements from 40 CFR Part 60, Subpart GG and the FESOP.

I. Section XI - Miscellaneous Processes

Since the last revision to the Title V permit, 40 CFR Part 63, Subpart ZZZZ has become applicable to the internal combustion (IC) units fired at this facility. The units have been added the significant emissions unit list and applicable requirements from the MACT have been included.

V. STREAMLINED REQUIREMENTS

There are no streamlined requirements.

VI. GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

1. Condition B. Permit Expiration
   This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.2-604 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement No. 3-2006".

2. Condition F. Failure/Malfunction Reporting
   Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

3. Condition J. Permit Modification
   This general condition cites the sections that follow:
   9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources
   9 VAC 5-80-190. Changes to Permits.
   9 VAC 5-80-260. Enforcement.
   9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources
   9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas
   9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas

4. Condition U. Malfunction as an Affirmative Defense
   The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

5. Condition Y. Asbestos Requirements
   The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

VII. CAIR

The facility has submitted an application for the Clean Air Interstate Rule (CAIR).

9 VAC 5 Chapter 140 - Parts 2-4: From EPA's Question and Answer memo:

Question 1. - The CAIR regulations refer to the CAIR permit as a "complete and separable portion of the Title V operating permit." What does this mean?

It means that the CAIR portion of the Title V permit must be a discrete "chapter" in the overall Title V permit See 40 CFR 96.120(b), 97.120(b), 96.220(b), 97.220(b), 96.320(b), and 97.320(b). To facilitate this requirement, EPA recommends that the permitting authority simply append the CAIR permit application (which references the CAIR standard requirements) to the Title V permit and include language stating that the provisions contained in the CAIR permit application are applicable requirements that are a binding and enforceable portion of the Title V permit.

As with permitting under the Acid Rain and NOX Budget Trading Programs, the CAIR permit is a portion of the Title V permit. As a consequence, the incorporation of CAIR requirements into the Title V permit should not modify any non-CAIR requirements already contained in the Title V permit.

Based on the above information, the CAIR application has been made Appendix C to the Title V permit. (See Appendix C)

The Cross State Air Pollution Rule (CSAPR) was promulgated on July 6, 2011. This rule was stayed by the D.C. Circuit court on December 15, 2011, leaving the CAIR regulation in effect until the legal issues are resolved. CSAPR will be applicable to this facility when it is released from the stay. In the interim, the facility will continue to comply with the CAIR regulation. The applicable requirement to remain in compliance with CAIR has been left in the permit at this time.

VIII. STATE ONLY APPLICABLE REQUIREMENTS

The permit includes the following state only applicable requirements:

9 VAC 5-40-140 Existing Source Standard for Odor
9 VAC 5-50-220 Existing Source Standard for Toxic Pollutants
9 VAC 5-50-140 New and Modified Source Standard for Odor
9 VAC 5-50-320 New and Modified Source Standard for Toxic Pollutants

IX. FUTURE APPLICABLE REQUIREMENTS

The Cross State Air Pollution Rule (CSAPR) was promulgated on July 6, 2011. This rule was stayed by the D.C. Circuit court on December 15, 2011, leaving the CAIR regulation in effect until the legal issues are resolved. This rule will be applicable to this facility when it is released from the stay. In the interim, the facility will continue to comply with the CAIR regulation.

X. INAPPLICABLE REQUIREMENTS

Inapplicable requirements are listed in Section XIII of the permit.

The startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-40-20 A 3 cannot be included in any Title V permit. This portion of the regulation is not part of the federally approved state implementation plan. The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction. Opacity exceedances during malfunction can be affirmatively defended provided all requirements of the affirmative defense section of this permit are met. Opacity exceedances during startup and shut down will be reviewed with enforcement discretion using the requirements of 9 VAC 5-40-20 E, which state that "At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions."

XI. COMPLIANCE PLAN

The facility is not under a compliance plan at this time.

XII. INSIGNIFICANT EMISSION UNITS

The insignificant emission units are listed in Section XII of the permit. The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

XIII. CONFIDENTIAL INFORMATION

The source has not identified any information as confidential. All portions of the application and permit are suitable for public review.

XIV. PUBLIC PARTICIPATION

The proposed permit was placed on public notice in the Tidewater News from **March 2, 2012 through April 2, 2012.**